

Table 19. Example Determination of the Incremental River Reach Flow for DWS1

Incremental flow (q) from the Headwater to USGS Station Northbridge

$q = QN - (QQ + QWWTF) / (DAN - DAQ) =$	0.56 cfs/mi ²
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Flows (Q)	cfs	WWTF	cfs
Northbridge USGS Station (QN)	125	UBWPAD	44.6
Quinsigamond River USGS Station (QQ)	11.0	Millbury	1.69
All WWTF above USGS Station Northbridge (QWWTF)	48.2	Grafton	1.86
		QWWTF	48.2

Drainage area (DA)	mi ²
USGS Northbridge (DAN)	143
USGS Quinsigamond (DAQ)	25.6

Incremental flow (q) from USGS Station Northbridge to USGS Station Woonsocket

$q = QW - (QN + QB + QWWTF) / (DAW - (DAN + DAB)) =$	0.46 cfs/mi ²
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Flows (Q)	cfs	WWTF	cfs
Woonsocket USGS Station (QW)	327	Northbridge	1.39
Northbridge USGS Station (QN)	125	Uxbridge	0.85
Branch River USGS Station (QB)	116	QWWTF	2.24
All WWTF below USGS Station Northbridge and above	2.24		

Drainage area (DA)	mi ²
USGS Woonsocket (DAW)	416
USGS Northbridge (DAN)	143
USGS Branch River (DAB)	91.2